

Operating Experience During Decommissioning

**Dave Lochbaum
May 2022**

Reactor Operating Experience

Office of Nuclear Regulatory Research

The Reactor Operating Experience (OpE) Program is a program established by agency policy to collect, communicate, and evaluate OpE information. It is an interoffice program that encompasses lessons learned from operating nuclear reactor events, research and test reactor events, events or issues identified at nuclear reactors under construction, security-related reactor events, and emergency preparedness issues. The core objectives are to (1) collect, evaluate, communicate, and apply OpE to support the NRC's goal of ensuring safety and security, (2) improve the effectiveness, efficiency, and realism of NRC decisions, and (3) provide stakeholders with timely, accurate, and balanced information.

One of the lessons learned from the March 1979 accident at Three Mile Island (TMI) involved operating experience. A similar event occurred in September 1977 at Davis-Besse, a sister plant to TMI. That event, and the measures that prevented it from resulting in reactor core damage, was not shared with other plant owners either by the NRC or by the reactor's manufacturer.

Properly implemented, operating experience enables everyone to emulate good practices and exorcise bad practices. "Secrets" undermine nuclear safety margins.

Sources of operating experience include:

- **Reactor and component vendors**
- **Nuclear Regulatory Commission (NRC)**
- **Institute of Nuclear Power Operations (INPO)**
- **Electric Power Research Institute (EPRI)**
- **Nuclear Energy Institute (NEI)**

Generic Communications

Bulletins

Bulletins (1) request licensee actions and/or information to address significant issues regarding matters of safety, security, safeguards, or environmental significance that have great urgency, and (2) require a written response.

Generic Letters

Generic letters (1) request licensee actions and/or information to address issues regarding emergent or routine matters of safety, security, safeguards, or environmental significance, and (2) require a written response.

Information Notices

Information notices communicate operating or analytical experience to the nuclear industry. Information notices may also communicate the results of recently completed research. The industry is expected to review the information for applicability and consider appropriate actions to avoid similar problems.

NRC's Generic Communications program is among the several methods used by the agency to share operating experience with its licensees.

INPO was formed by the nuclear industry in December 1979.

INPO collects and shares operating experience.

INPO periodically evaluates plant performance. Unlike NRC's evaluations against regulatory minimums, INPO assesses performance against standards of excellence.

INPO accredits training programs for nuclear workers.

NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555

March 9, 1982

TO ALL LICENSEES OF OPERATING PLANTS, APPLICANTS FOR OPERATING LICENSES AND HOLDERS OF CONSTRUCTION PERMITS

Gentlemen:

SUBJECT: USE OF INPO SEE-IN PROGRAM (GENERIC LETTER NO. 82-04)

Item I.C.5 of the TMI Action Plan, requires licensees to develop procedures to assure that important operating experience originating both within and outside the utility organization is continually provided to operators and other personnel, and is incorporated into training and retraining programs. Accomplishing this task requires that a utility assure that all events that occur throughout the industry are screened to determine whether or not they are applicable to the utility's plant, and that those events which could be significant are evaluated for applicability to the utility's plant.

The initial screening process is a large undertaking involving several thousand event reports each year from the U. S. nuclear plants alone. Such an undertaking by any one utility is both expensive and demanding of resources.

In an effort to provide a mechanism for central collection and screening of all events from both U. S. and foreign nuclear plants, the Institute of Nuclear Power Operations (INPO) has established a Significant Event Evaluation and Information Network (SEE-IN). The latest description of the SEE-IN program is provided in a January 1982 program description from INPO entitled "Significant Event Evaluation and Information Network (SEE-IN)."

The NRC has now completed its review of the SEE-IN program and a recent letter to INPO (copy enclosed) endorses utility use of the program. As stated in the letter, use of SEE-IN will relieve individual nuclear plant operators and constructors of the necessity of setting up large staffs to obtain and screen the large volume of raw data pertaining to operational experience throughout the industry. The NRC believes that full participation in SEE-IN will enhance your ability to meet the intent of the procedures approved under TMI Action Plan Item I.C.5.

An excerpt from the Convention on Nuclear Safety Report:

The Role of the Institute of Nuclear Power Operations in Supporting the United States Commercial Nuclear Power Industry's Focus on Nuclear Safety

Executive Summary

The U.S. nuclear power industry established the Institute of Nuclear Power Operations (INPO or "the Institute") in 1979 after the event at the Three Mile Island Nuclear Station to promote the highest levels of safety and reliability—to *promote excellence*—in plant operation. INPO is a nongovernmental corporation that operates on a not-for-profit basis. Under United States tax law, the company is classified as a **charitable organization** that "relieves the burden of government."

Since its inception, all utility organizations that have direct responsibility and legal authority to operate or construct commercial nuclear plants in the United States have maintained continuous membership in INPO, which currently has 22 members. In addition, many utility organizations that jointly own U.S. nuclear power plants are associate members. A number of major U.S. and international suppliers also voluntarily participate in the Institute's activities and programs

Financial and Human Resources

The 2019 operating budget for INPO of \$108 million is primarily funded through member dues. Dues are approved annually by the INPO Board of Directors and are assessed based on the number of each member's nuclear plant sites and units.

INPO, a "charitable organization," is charitable only to its members. Non-members cannot obtain/review INPO documents.

Source: https://www.epw.senate.gov/public/_cache/files/7/3/736241ed-3922-4144-a905-b965bb1cbe88/A7587FA91CC97E396A67DF16C8D4665A.willard-testimony-11.13.2019.pdf Accessed 05/14/2022

Groundwater Protection Guidelines for Nuclear Power Plants

Public Edition

1016099

Final Report, January 2008

EPRI Project Manager
K. Kim

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EPRI issues reports on trends and problems as well as documents like this one on best practices for implementing effective programs.

Decommissioning Lessons Learned

Draft Report, April 2007

EPRI Project Manager
S. Bushart

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EPRI has examined decommissioning activities at multiple nuclear plant sites to extract lessons learned.

NEIL WILMSHURST
Vice President and
Chief Nuclear Officer

Ref. EPRI Project Number 669

June 1, 2012

Attention: Gregory Hatchett
Document Control Desk
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Subject: Request for Withholding of the Following Commercial Document:
Decommissioning Experiences and Lessons Learned: Decommissioning Costs
(1023025)

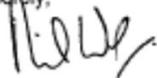
To Whom It May Concern:

This is a request under 10 C.F.R. §2.390(a)(4) that the U.S. Nuclear Regulatory Commission ("NRC") withhold from public disclosure the information identified in the enclosed Affidavit consisting of the commercial information owned by Electric Power Research Institute, Inc. ("EPRI") identified above (the "Report"). Copies of the Report and the Affidavit in support of this request are enclosed.

EPRI desires to disclose the Report in confidence to assist the NRC as requested on May 10, 2012. The Report is not to be divulged to anyone outside of the NRC nor shall any copies be made of the Report provided herein. EPRI welcomes any discussions and/or questions relating to the information enclosed.

If you have any questions about the legal aspects of this request for withholding, please do not hesitate to contact me at (704) 595-2732. Questions on the content of the Report should be directed to Karen Kim of EPRI at (650) 855-2190.

Sincerely,



Attachment(s)

c: Sheldon Stuchell, NRC (sheldon.stuchell@nrc.gov)

EPRI's own reports are usually not publically available since they are funded by EPRI's clients and customers.

When EPRI partners with DOE, NRC or other federal agency to develop a report, these government-subsidized reports are generally made publicly available.



GUIDELINES FOR WEATHER-RELATED ADMINISTRATIVE CONTROLS FOR SHORT DURATION OUTDOOR DRY CASK STORAGE OPERATIONS

Prepared by the Nuclear Energy Institute
February 2022

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nei.org

NEI is the nuclear industry's trade group. It also issues guidance documents identifying ways and means to achieve and sustain compliance with NRC's regulatory requirements.

Nuclear Energy Institute defeats NextEra Energy lawsuit claiming rights to NEI's member-only data system

SEPTEMBER 2018

Clients Nuclear Energy Institute, Inc.

Jones Day obtained a significant victory on behalf of Nuclear Energy Institute, Inc. ("NEI"), a trade association for companies involved in the generation and application of nuclear power. Four former members, all subsidiaries of NextEra Energy, Inc., sued NEI claiming breach of contract, unjust enrichment, and tortious interference with business relationships after NEI discontinued the former members' participation in NEI's data system that is used to more efficiently screen workers before they can have access to nuclear power plants.

Judge Middlebrooks of the U.S. District Court for the Southern District of Florida granted summary judgment on all counts in favor of NEI, ruling that NEI fully complied with the agreement governing participation in the data system and did not wrongfully interfere with any of the NextEra companies' business relationships.

Florida Power & Light Company, et al. v. Nuclear Energy Institute, Inc., No. 9:18-cv-80118 (S.D. Fla.)

Not all nuclear plant owners and nuclear service companies are NEI members. While many NEI documents are publicly available, NEI also has services – like the security background database mentioned above – available only to its paid-up members.

Source: <https://www.jonesday.com/en/practices/experience/2018/09/nuclear-energy-institute-defeats-nextera-energy-la>
Accessed 05/14/2022

Operating experience is an essential component of a successful nuclear safety program.

NRC's generic communications and other activities provide operating experience to its licensees and the public.

INPO, EPRI, and NEI also provide operating experience to their members and clients and sometimes the public.

Is Holtec a member of INPO?

Is Holtec a member of EPRI?

Is Holtec a member of NEI?

How robust is Holtec's operating experience program?

How does it account for missing input information it does not receive from INPO, EPRI, and/or NEI if Holtec isn't a dues paying member?